

ASX Code: VTX

ETHICALLY AND ENVIRONMENTALLY SUSTAINABLE

- Advanced Hill End Gold Project (NSW) 14km strike high grade gold system – to be developed on a large scale 1.6m ozs historically mined
- Advanced Hargraves Gold Project (NSW) moving to a PFS
- Combined existing 2012 JORC 257K oz @ 2.11 g/t & significant exploration upside likely to be amenable to gravity recovery, with recoveries potentially as high as 95%
- Highly prospective Pride of Elvire Gold Project (WA) & Taylors Rock Nickel Gold Project (WA)
- Hill End is home to the largest gold reef nugget ever to be found – Globally



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ASX ANNOUCEMENT 21 SEPTEMBER 2022

VISIBLE GOLD AND SHEETED VEINING INTERSECTED AT RED HILL DEPOSIT

Latest hole highlights the potential of the RED Hill project; Results will form part of Resource update set for coming quarter

<u>KEY HIGHLIGHTS:</u>

- Visible gold intersected in 74.2m downhole over 40mm-wide mineralised zone from diamond drill-hole VRHD004.
- VRHD004 was designed to intersect deeper mineralization at circa 110m downhole in the southern portion of the Red Hill mineralization. This hole is still currently being drilled.
- VRHD004 has also intersected a non targeted zone between 75m and 96m, consisting of massive lode type quartz veins.
- This is the third hole to be logged with no core submitted for assaying as yet.
- Sampling and analyses of the mineralised intercepts will be fast-tracked to be included in an updated Red Hill MRE scheduled for the December 2022 Quarter

Vertex Limited (ASX: **VTX**) (**Vertex** or the **Company**) is pleased to present the following drill-program update at its Red Hill gold project. Diamond core drilling is progressing well with 326.8m drilled to date, with 4 holes logged and no samples submitted to date. The latest hole logged and drilled to 95m, and targeting 120m, was highlighted by the occurrence of visible gold. Hole VRHD004 at 74.2m over a 40mm zone showed in Fig 1,2 and 3. Drill core preparation is yet to be completed for the first 4 holes and assays from these are expected in 6-8 weeks. The Red Hill gold project forms part of the high-grade historic Hill End gold mining precinct.

Vertex Minerals Technical director Tully Richards said:

"Visible Gold characterises numerous gold deposits at Hill End, including Red Hill. That said, it's always special when it is observed. it's better to be looking at it than looking for it. However, there're additional important observations made regarding VRHD004, the Company's 4th (and still being drilled) diamond drill hole of its Red Hill resource development drill out. From the description of a significant 'grit marker bed' to the recognition of a number of vein assemblages, the above will be important in the interpretation and understanding of the resource at Red Hill. Knowledge gleaned from the Company's drilling at Red Hill will be applied to the greater understanding of other systems, under licence, and along strike from Red Hill."



INTERCEPT IMAGES

Cautionary Statement

There are no assays being reported in this release, only images of visible gold intercepts. The Company notes that assays for drill-hole VRHD004 remain pending.



Figure 1 Visible gold in quartz vug



Figure 2 Visible Gold shown in the red circle in the HQ core



Figure 3 Further Visible gold within the quartz vug



Table 1 Hole 004 Drill Collar Table

HOLE ID	EASTING	NORTHING	DIP	AZI TRUE NTH	EOH	RL	PROSPECT	EL	Start	Finish	Gridname	Survey Type	Drilling Type	Drilling Company	Comment
VRHD001	726435	6346812	-60	270	51.5	841	Red Hill	5868	23/08/2022	25/08/2022	MGA94	SS	DD	The Drillers	pID 1
VRHD002	726454	6346857	-90	0	81.8	845	Red Hill	5868	26/08/2022	30/08/2022	MGA94	SS	DD	The Drillers	pID 19 - Follow up of RHRC155
VRHD003	726493	6346892	-60	270	108.5	854	Red Hill	5868	31/08/2022	6/09/2022	MGA94	SS	DD	The Drillers	pID 5
VRHD004	726514	6346918	-65	270	96	858	Red Hill	5868	7/09/2022		MGA95	SS	DD	The Drillers	pID7 - Still being drilled.

Table 2 Lithology log of holeVRHD004 to 90.5m

Lithology								
HoleID	dFrom	dTO	Colour	Colour_2	Lithology	Lithology_2	Comments	
VRHD004	0	0.6	rebr		CLAY		Soil with pebbels and clay.	
VRHD004	0.6	2.4	rebr	gy	CNGL	CLAY	Motteled and partly leached conglomerate with clasts to 35 mm.	
VRHD004	2.4	3.3	lgybr		CNGL	CLAY	Leacged and weathered conglomerate.	
VRHD004	3.3	5.72	crgy		SDST		Very course sandstone with graines to 2 mm.	
VRHD004	5.72	11.8	gygr		SDST	SLST	Interbeded sansstone/siltstones. Bed ranging in thickness to 100 mm.	
VRHD004	11.8	17.4	lbr	gr	SDST		Fine to medium grained sandstone, no grading observed.	
VRHD004	17.4	25.2	lgy		SDST	SLST	Interbeded sansstone/siltstones. Strong iron oxide from weathering on fracture surfaces and bedding planes.	
							Fine to medium grained sandstone, no grading observed. Iron oxides on fractures. Rock mass generally	
VRHD004	25.2	26.25	lgy		SDST		oxidised and leached.	
VRHD004	26.25	31.25	lgy		SDST	SLST	Interbeded sansstone/siltstones. Strong iron oxide from weathering on fracture surfaces and bedding planes.	
VRHD004	31.25	33	lgy		SDST		Fine grained grey sandstone.	
							Thickly interbeded sansstone/siltstones. Moderate strength iron oxide from weathering on fracture surfaces	
VRHD004	33	48.3	gy		SDST	SLST	and bedding planes.	
VRHD004	48.3	49	gy		SDST	CNGL	Poorly sorted course sandstone conglomerte angular, elongated clasts to 40 mm in size.	
VRHD004	49	51	gy		SDST		Well sorted sandstone with gradational bedding fining up.	
VRHD004	51	52.7	gy		SDST	CNGL	Poorly sorted course sandstone conglomerte angular, occasionally elongated clasts to 30 mm in size.	
VRHD004	52.7	53.68	gy		SDST		Finegrained sandstone with silica alteration increaseing with depth.	
VRHD004	53.68	54	lgy		TUFF		Meduim grained, silica altered feldspathic tuff with feldspars grained to 2 mm.	
VRHD004	54	58.3	gy		SDST		Finegrained sandstone with silica alteration increaseing with depth.	
VRHD004	58.3	58.6	lgy		TUFF		Meduim grained, silica altered feldspathic tuff.	
VRHD004	58.6	59.3	gy		SDST		Silica alteration (induration) in creasing with depth.	
VRHD004	59.3	60.3	lgy		TUFF		Meduim grained, silica altered feldspathic tuff. Moderatly silica altered.	
VRHD004	60.3	65.4	gy		SDST		Occasionally interbedded fine grained, silica altered sandstone.	
VRHD004	65.4	68.9	lgy		GYWK		Greywacke, highly silica altered and glassy in apperance. Could be confused with chert.	
							Interbedded siltstone/sandstone. Beds up to 100 mm in thickness. Moderate to strong silica and chlorite	
VRHD004	68.9	77.35	gygr		SLST/QV	SDST	alteration. Laminated quartz veining with one vein at 74.2 m containing visable gold.	
VRHD004	77.35	78.15	lgy		GYWK		Greywacke, highly silica altered and glassy in apperance. Could be confused with chert.	
VRHD004	78.15	90.5	lgy		SDST		Fine to medium to fine grained sandstone with strong silica alteration.	

(refer to Appendix 3 for abbreviation reference terms)

VRHD004 – Drill Hole Summary Log:

Hole VRHD004 is dominated by semi massive fine to medium grained beds of sandstone interbedded with siltstones and rare tuffs, conglomerates and greywackes. From 3.3-5.72 m/dh this hole intersected at a medium coarse grained grit sandstone marker bed which has not previously been seen in the current drilling program. This unit has been identified in previous drill programs by different companies. Stratigraphically overlaying the grit marker unit is a conglomerate consisting of semi-angular to angular and elongated pebbles to 40 mm in size.

From 5.72 - 68.9 m/dh this hole is dominated by sandy lithologies occasionally interbedded by siltstone beds, small feldspathic tuff bands to ~300 mm in thickness, poorly sorted conglomerates with a medium grained sandstone matrix and medium to fine grained greywacke. Iron oxide coatings on fracture surfaces along with the dissolution of calcite from deep weathering that extends to considerable depth >70 m/dh. Alteration in this zone is dominated by weak to moderate silica alteration of the sandstones and greywackes. Weak chlorite alteration is restricted to the siltstone beds. Both the silica and chlorite alteration has been noted to be increasing in strength with depth.



From 68.9 - 77.35 m/dh hosts interbedded siltstone/sandstone with beds up to 100 mm in thickness. Moderate to strong silica and chlorite alteration dominates this interval. The interval from 71.24 m/dh – 74.3 m/dh hosts three dark grey, fractured, pitted laminated quartz veins which range in size from 30 mm to 100 mm in thickness. These three veins have been recognised as being quite unique when compared to semi-massive to massive white quartz±calcite veins observed further down hole. These veins lie approximately 3 m above the main lode and cross cutting vein package. Laminations observed within this set of veins hosts traces of chlorite and rare pyrite. These veins have been host to calcite, but subsequent fracturing and weathering has dissolved the calcite leaving small open vugs to ~7 mm in width. The deepest of these veins is at 74.2 m/dh and hosts two open vugs that contain small flecks of visible gold to 0.5 mm in size. From historical accounts of the mining and mineralization at Red Hill it is thought that these veins are what where being historically mined.

The majority of massive lode type quartz veins lie from ~75.8 - 96 m/dh. These veins can be categorized in to two main assemblages and morphologies. The first and most dominant vein type is comprised of massive white buck quartz with little to no contained calcite. These veins range in thickness from 40 mm to ~300 mm. These veins host minor amounts of arsenopyrite and trace quantities of pyrite to 0.1% of the vein mass. The second and less obvious veins observed are a set of thin, light grey, vitreous quartz stringer veins which appear to form a stockwork vein network. These veins cross cut both lithological boundaries and earlier massive quartz veins. These stringers host minor amounts of arsenopyrite to no greater concentration of 0.3% of the vein mass.

The interval from 75.8 - 96 m /dh is dominated by a continuous fine to medium grained silica altered sandstone unit with no observable bedding or grading can be identified. The presence of disseminated glomerophyric arsenopyrite up to 3 % has been observed in several zones from 80 - 96 m/dh.

This hole has been designed to drilled on a steeper inclination of -65° in order to test for deeper mineralization in the southern portion of the Red Hill mineralization. This hole is still currently being drilled.

DRILLING TO DATE:

Resource diamond drilling commenced on at the Whites cross-course which is located at the southern end of the Red Hill deposit on the 23rd August 2022. To date 326.8 m has been drilled. The initial holes (VRHD001, VRHD002, VRHD003 and VRHD004) have been designed and drilled to infill previous exploration and later resource drilling programs completed by BHP in the late 1980's and Hill End Gold Ltd. in the late 2000's.

The north-south strike of lode gold veining in Hill End goldfield is intersected by semi-regular crosscutting faults east-west which brittlely deform the host rocks and lode mineralisation. These east-west fault structures allow for introduction of secondary quartz stockwork veins and gold mineralization to develop within the brecciated fault zones and overprint the primary north-south lode gold vein mineralisation.

These crosscutting structures are locally referred at Hill End as 'cross-courses' and these cross-courses have historically recoded the highest grades in the Hill End goldfields. The Whites cross-course is one of these enriched east-west crosscutting structures.



Host lithologies in the rocks are predominantly fine-grained sandstone and greywacke with interbeds of shale to 500 mm thickness all of which overlay a sequence of fine grained turbidites which can number up to 14 sequences per metre.

The Whites cross-course area is dominated by strong and deep weathering and oxidation to ~60 m/dh. Iron oxide coating fractures have been observed as deep as 75 m/dh in VRHD003.

Vein morphologies and composition vairy from massive buck white quartz±iron oxide, semitranslucent grey quartz, quartz-calcite, quartz-calcite-chlorite, quartz-iron oxide vugs and selvages, quartz-chlorite and quartz-pyrite (±chalcopyrite) and quartz-arsenopyrite±calcite.

The main load presents its self as a mixture of laminated, crack seal, sheeted and stock work quartz + calcite \pm chlorite veins ranging in thickness from 5 mm to ~700 mm.

Glomerophyric arsenopyrite crystalline aggerates up to 7 mm across and <5% by volume and has been observed in a silica altered, fine-grained sandstone. This sandstone is unique in its appearance and is being used as a marker horizon between drill holes and sections. Arsenopyrite crystals and clots have been observed in crack seal quartz-calcite veins central located within the observed stockwork vein package.

Visible gold has been observed in a 40 mm wide grey, crack sealed quartz vein with minor carbonate, chlorite and iron oxides at 74.2 m/dh in hole VRHD004. This hole is currently being drilled.

RED HILL BACKGROUND

The Red Hill line of lode (shown in Figure 5) lies on the east limb of the Hill End Anticline and is contiguous with the Hawkins Hill deposit as illustrated in Figure 5, which is approximately 10km to the south.

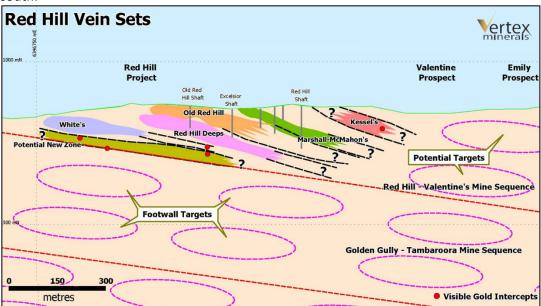


Figure 4 - Red Hill Vein sets showing potential below down dip, down plunge and along strike.



Long se	ection lookir	ng west			
900mRL 600mRL 300mRL 0mRL	Hawkins Hill workings	v vi lode	Golden Gully workings	Red Hill Resource Go Germantown line of lode	Red Hill line of fode
	Hill En	d historic w	orkings ar	nd geologica	al potential

Figure 5 - Line of Lode from Hawkins Hill to Red Hill (Note the limited shallow historical mining along the 14km strike)

The Red Hill area was extensively mined historically, but most of the old workings were hampered by a high-water table. The Red Hill shaft at 131 metres being the deepest in the area, although most of the shafts were limited to a maximum depth of 59 metres below surface as a result of water inflows.

A comprehensive data review by Vertex has highlighted the near surface potential of the Red Hill area. Vertex plans to drill Red Hill in an upcoming exploration program with the aim of adding significant value to the Project.

EXISTING RED HILL RESOURCE ESTIMATE

On 15 November 2015 Hill End Gold Limited (HEG) announced the resource estimate for the Red Hill Deposit. For completeness, the Table 1 relating to this resource is found in Appendix A and summarised below.

Preliminary studies indicated that development of the Red Hill Project may be viable as a stand-alone operation or could add significant value to any development of the Hargraves Gold Project. Work completed by HEG included comprehensive re-logging and re-interpretation of selected drill core. Detailed re-interpretation of the controls of the high-grade gold mineralisation for the Red Hill deposit confirmed the kilometre-scale continuity of the mineralised vein sets and stockworks along the intersection of the host horizons with feeder structures.

The work culminated in a new JORC 2012 resource estimate for the Red Hill deposit which incorporated all the drilling above 700 mRL (approximately 150m below surface). 80,000oz at 1.7g/t (Refer to table below)



	Classification	Tonnes (t)	Grade (Au g/t)	Contained oz
Hargraves	Indicated	1,108,651	2.7	97,233
	Inferred	1,210,335	2.1	80,419
Sub-Total		2,318,986	2.4	177,652
Red Hill	Indicated	413,000	1.4	18,600
	Inferred	1,063,000	1.8	61,400
Sub-Total		1,475,000	1.7	80,000
	Indicated	1,521,651	2.35	115,833
Combined	Inferred	2,273,335	1.96	141,819
Total		3,791,986	2.11	257,653

2012 JORC-compliant Mineral Resources

Hargraves: 0.8 g/t reporting cut-off ASX Announcement 29 May '20

Red Hill: 0.5 g/t per block, ordinary kriging grade interpolation, classified Mineral Resources limited to 160mRL below surface. ASX announcement 30 Nov 2015: <u>ASX announcement Nov '15</u>

This announcement has been approved by the Board of Vertex Minerals Limited.

Further Information:

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JORC Compliance Statements

This website contains references to Mineral Resource estimates, which have been extracted from previous ASX announcements as set above made by Peak Resources Ltd (ASX:PUA) the parent company of VTX prior to the Company's separate listing in 2022. For full details of Exploration Results in this release that have been previously announced, refer to those announcements.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the said announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially modified from the original market announcements.

Competent Persons Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Roger Jackson, a Director and Shareholder of the Company, who is a 25+ year Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) and a Member of Australian Institute of Company Directors. Mr. Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves". Mr. Jackson consents to the inclusion of the data contained in relevant resource reports used for this announcement as well as the matters, form and context in which the relevant data appears.



Forward Looking Statements and Important Notice

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Vertex Minerals' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Vertex Minerals makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.



APPENDIX 1. RED HILL – JORC CODE TABLE 1 CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA

Section 1: Sampling Techniques and Data

CRITERIA	JORC Code Explanation	Commentary
SAMPLING TECHNIQUES	 Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	 The quality of diamond coring is generally medium – high because the method is designed to sample the rock mass effectively in most conditions. Consequently, these samples can be representative of the interval drilled and can be used for Mineral Resource estimation.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	• Diamond drilling is also an established method aimed at collecting representative samples of the interval being drilled.
	• Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g.,submarine nodules) may warrant disclosure of detailed information.	 Economic gold mineralisation is measured in terms of parts per million and therefore rigorous sampling techniques must be adopted to ensure quantitative, precise measurements of gold concentration. If gold is present as medium – coarse grains, the entire sampling, sub- sampling, and analytical process must be more stringent. Red Hill gold is coarse grained.
DRILLING TECHNIQUES	 Drill type (e.g., core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc). 	 Vertex Drilling: Diamond Drilling in HQ triple tube size were drilled at Red Hill in 2022. All holes were oriented using an Ace instrument.
DRILL SAMPLE RECOVERY	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 Vertex drilling: Sample recovery was measured on a per-run basis and generally reported to be greater than 95%, except where drilling in the upper, weathered, and oxidised zones. However, Vertex also reported some core loss associated with zones of alteration and mineralisation that could result in potential for sample bias.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 Vertex drilling: Used chrome barrels and controlled drilling in broken ground to maximise sample recovery.
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 No assessment has been completed to determine if there is a relationship between sample recovery and grade, and whether there is any potential for sample bias associated with the drilling methods used to date.



CRITERIA	JORC Code Explanation	Commentary
LOGGING	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	 Vertex drilling: Drill core was logged for lithology, structure, alteration, mineralisation, and veining, which is deemed to be appropriate for the style of mineralisation and the lithologies encountered. All core was photographed. Logging information is adequate to support Mineral Resource estimation. Information to support geotechnical studies is available.
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	 Vertex drilling: Logging of core is mostly qualitative, except for some semi- quantitative logging of sulphide content, quartz veining, RQD, and geotechnical parameters.
	• The total length and percentage of the relevant intersections logged.	• Vertex drilling: Geological logs were completed for all drilled intervals.
SUB-SAMPLING TECHNIQUES AND SAMPLE PREPARATION	• If core, whether cut or sawn and whether quarter, half or all core taken.	 Vertex drilling: Vertex cut core samples in half or quarter using a diamond saw and where appropriate used geological contacts or mineralisation to define sample intervals.
	 If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 	• No non-core drilling has been undertaken. RC drilling was suspended.
	• For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	• Vertex drilling: Half core yet to be submitted for assaying
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 	• Vertex drilling: Drill core samples of cut core were consistently taken from the same side of the orientation line on the core to maintain consistency.
	 Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. 	 Vertex drilling: QA/QC procedures included the insertion of quarter core field duplicates at the insertion rate of 1 in 20 samples. Field blanks will also submitted to the laboratory.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• The larger HQ size core was chosen to cater for the nuggety effect



CRITERIA	JORC Code Explanation	Commentary
QUALITY OF ASSAY DATA AND LABORATORY TESTS	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	 No samples have been submitted for assaying yet
	 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	 No geophysical tools, spectrometers, or handheld XRF instruments have been used to date to determine chemical composition at a semi-quantitative level of accuracy.
	• Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	No samples have been dispatched to date.
VERIFICATION OF SAMPLING AND ASSAYING	• The verification of significant intersections by either independent or alternative company personnel.	It has not been possible to independently verify significant intersections to date.
	• The use of twinned holes.	• There has been no use of twinned holes to date.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 Vertex drilling: Primary logging data was recorded digitally onto electronic spread sheets and validated against code tables by the logging geologist. Primary analytical data was received electronically in csv file format and imported directly into an electronic assay register spread sheet. Data validation was conducted by comparing the spreadsheet data against the Certificate of Analysis supplied as a secured pdf file by the laboratory.
	Discuss any adjustment to assay data.	No adjustments to assay data have been made.
LOCATION OF DATA POINTS	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	• Vertex surface drilling: Drillhole collar locations were initially set out (and reported) using a handheld GPS with a location error of +/- 5m. All holes will be subsequently surveyed by contract surveyor to a sub-metre accuracy, with data supplied electronically as spreadsheets and pdf files. The azimuth and dip at the start of the hole was recorded using a line of sight Suunto compass and Suunto clinometer by the site geologist. The orientation and dip of drillholes are measured with downhole surveys @ 15 m, 30 m, then every 30 m using a REFLEX single/multi-shot survey tool. End of hole surveys were also taken for each hole. At hole completion, all holes were gyro surveyed. Vertex also employed a contract survey to survey the as-drilled drillhole collars to sub-metre accuracy.



CRITERIA	JORC Code Explanation	Commentary
	• Specification of the grid system used.	• The co-ordinate system used is MGA94 zone 55 Datum.
	• Quality and adequacy of topographic control.	 Quality of the surface topographic control data is poor and is currently reliant on public domain data. A lidar survey has been undertaken
DATA SPACING AND DISTRIBUTION	Data spacing for reporting of Exploration Results.	The spacing of drillhole data is variable.
	• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	 There are no Mineral Resources or Ore Reserves. There is insufficient drill spacing to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation.
	Whether sample compositing has been applied.	• No sample compositing was carried out on site.
ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	 Drillholes were oriented to intersect the interpreted mineralisation zones as oblique (perpendicular) as possible. Orientated drill core collected by Vertex has confirmed the orientation of drilling. To the extent known, drilling is assumed to be unbiased.
	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	 No sampling bias is considered to have been introduced in drilling completed.
SAMPLE SECURITY	• The measures taken to ensure sample security.	• Vertex drilling: Drilling and sampling was supervised and undertaken by company staff.
AUDITS OR REVIEWS	• The results of any audits sampling techniques and or reviews of data.	 Vertex drilling: Internal auditing procedures and reviews were regularly undertaken on sampling techniques, standard operating procedures, and laboratory processes.



Section 2: Reporting of Exploration Results

CRITERIA	JORC Code explanation	Commentary
MINERAL TENEMENT AND LAND TENURE STATUS	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	 The Project tenements comprise EL5868. All licences are 100% held by Vertex Resources Pty Ltd.
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• All tenements are in good standing.
EXPLORATION DONE BY OTHER PARTIES	 Acknowledgment and appraisal of exploration by other parties. 	Year Company Drill Type Holes Drilled RC (m) DD (m) Total Drilled (m) 1984 Flanagan McAdam DD 8 1,674.07 1984 Flanagan McAdam DD 8 1,674.07 1989 BHP-Utah Minerals International RC 2.248 2,248 2004 HEG Limited RC /DD 31 1,635 1,061.7 2,896.7 2007 HEG Limited RC/DD 18 1,551 581.3 2,132.3 2008 HEG Limited RC/DD 19 394 4,179.8 4,573.8 2011 HEG Limited RC 9 591 591 591 Total Included in Current Resource 155 9,755 7,496.87 17,251.87
GEOLOGY	• Deposit type, geological setting, and style of mineralisation.	The Red Hill system lies within a mineralised corridor on the east limb of the Hill End Anticline. It is hosted by thin to thick bedded turbidites, massive quartzose feldspathic volcaniclastic sandstones, siltstone and shale of the Early Devonian (416-407 Ma) Crudine Group, metamorphosed to greenschist facies. The mineralised corridor generally parallels the axis of the Hill End Anticline, which strikes 020° and plunges gently to the north with a relatively broad, regular axial crest. A series of bedding-parallel NNW-striking, moderately east dipping gold mineralised shoots on the east limbof the Hill End Anticline are a single linked system of bedding-parallel quartz veins that carry shoots of high-grade Au mineralisation where they intersect a zone of low displacement faults that strike NNE and dip steeply east. The most significant high-grade Au-mineralised quartz veins within the mineralised corridor appear to be bedding-parallel, and are often in the immediate footwall or hangingwall of especially thick, coarse-grained mechanically strong turbidite units. Bedding dips relatively steeply (65°-90° east) within the mineralised zone at Red Hill, which is steeper than is expected for the local fold geometry (dip 45°-60° east. This suggests an additional structural



CRITERIA	JORC Code explanation	Commentary
		influence whereby bedding has locally been rotated to be near- parallel to the cleavage as a result of the action of the low-displacement faults. The low displacement faults are poorly identified in outcrop and drill core, but appears to cause, or are localised by, a flexure or kink along a steeper-dipping portion of the eastern limb of the Hill End Anticline. This steepening of the east limb is most strongly developed in the Red Hill zone of the system, decreasing north through the Valentine into the Emily zone and south through White's zone. Vein sets within the RedHill zone will intersect Indicator-type faults at a lower angle and have larger areas of intersection and reaction, resulting in greater tonnage of high-grade Au mineralisation.
DRILL HOLE INFORMATION	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: Easting and northing of the drill hole collar. Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar. Dip and azimuth of the hole. Down hole length and interception depth. Hole length. 	Refer to Appendix 2.
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Refer to Appendix 2.
DATA AGGREGATION METHODS	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. 	No results are being reported
	 Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	 No grades are reported



CRITERIA	JORC Code explanation	Commentary
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No metal equivalents are reported.
RELATIONSHIP BETWEEN	• These relationships are particularly important in the reporting of Exploration Results.	• No local grid has been applied.
MINERALISATIO N WIDTHS AND INTERCEPT LENGTHS	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• Drillholes were oriented perpendicular to the strike of the shear zone and angled in order to intersect the moderately dipping mineralised zones at a high angle.
	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	• The mineralised intercepts generally intersect the interpreted dip of the mineralisation at a high angle but are not true widths.
DIAGRAMS	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	• Refer to figures contained within this report.
BALANCED REPORTING	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Balanced reporting of Exploration Results presented within this report.



CRITERIA	JO	RC Code explanation	Со	mmentary
OTHER SUBSTANTIVE EXPLORATION DATA	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	The Project includes a large amount of exploration data collected by previous companies, including regional stream sediment geochemical data, soil sample and rock chip data, geological mapping data, drilling data, geophysical survey data, and costean data. Much of this data has been captured and validated into a GIS database. Previous mining has been limited and involved very selective mining and hand sorting. No systematic data has been collected to date to assess metallurgy and mining parameters relevant to a modern operation.
FURTHER WORK	•	The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Vertex plans to conduct further drilling followed by Resourcing, met work, tailings characterization, waste characterization to then undertake a scoping study
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	Refer to figures contained within this report.

APPENDIX 2. RED HILL DRILLING

Company	Target	Hole ID	Hole Type	East (MGA)	North (MGA)	RL	Depth (m)	Dip (°)	Azimuth (° Mag)	Licence	Year
Vertex	Red Hill	VRHD004	Diamond	726514	6346918	858	96	-65	270	EL 5868	2022



APPENDIX 3. LITHOLOGY REFERENCE TERMS

lour	DV	Lithology
		Breccia
		Chert
		Clay
brown-orange	CLOSS	Core-Loss
cream	CNGL	Conglomerate
cream-grey	FLT	Fault
dark brown	GYWK	greywacke
		overburden
		quartz vein
		sandstone
		shale, black
		shale
		siltstone
green-brown	SLST/QV	siltstone/quartz veining
green-grey	SLTE	slate
	TBDT	turbidite
		tuff
		volcanics
	NK	No Returne
grey-pink		
grey-red		
•		
	nge	
light green-grey	/	
	n	
	ge	
light grey-red		
light grey-yellow	N	
light orange		
orange-black		
orange-brown		
orange-red		
red-brown		
red-orange		
tan		
	-	
white-orange		
white-yellow		
writte-yellow		
yellow		
yellow		
yellow yellow-brown		
yellow		
	black brown-grey brown-orange cream-grey dark brown-ora dark brown-ora dark green dark green dark green dark grey- dark green green-brown green-grey grey-black grey-brown grey-green grey-black grey-brown grey-green grey-black grey-vorange grey-black grey-white khaki light brown-gree light grey-green light grey-red light grey-red light grey-green light grey-pink light orange-black orange-black orange-red olive pink-brown purple red-brown red-brown	black BX brown CHAT brown-orage CLAY brown-orange CLOSS cream CNGL cream-grey FLT dark brown-ora OVB dark green QV dark green SDST dark green SDST dark green SST dark green SST dark green SUST dark green SUST dark green SUST green-brown SLST/QV green-grey SLTE grey-brown VC grey-green NR grey-yorange II grey-red Grey-grey grey-red II grey-red II light grey-red II light grey-yenlow II light grey-pink II light grey-pink </td